

**OAKLAND**



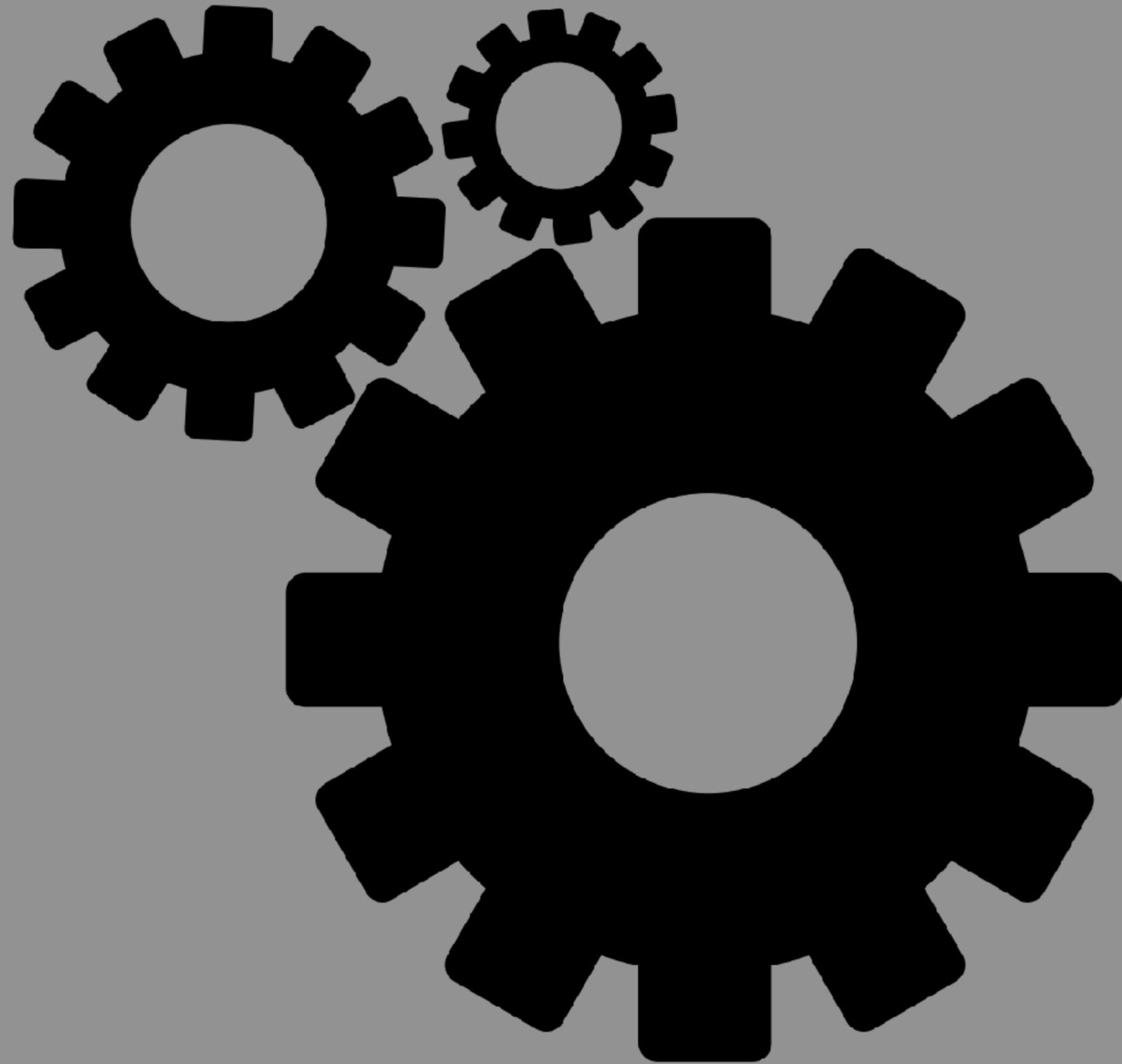


# Organizational Structures



*“If I have seen further than others, it is by standing on the shoulders of giants.”*

Isaac Newton





# Platform Engineering



# Rise of the

Platform  
Platform  
Platform  
Platform  
Platform  
Platform  
Platform

*Jem Young  
Engineering Manager*



# Web **N** Foundation



# N SERIES ISLAND OF THE SEA WOLVES

▶ Play

i More Info



TV-PG

## Popular on Netflix



STEP 2 OF 3

## Choose the plan that's right for you

- ✓ Watch all you want. Ad-free.
- ✓ Recommendations just for you.
- ✓ Change or cancel your plan anytime.

	Basic	Standard	Premium
Monthly price	\$9.99	\$15.49	\$19.99
Video quality	Good	Better	Best
Resolution	480p	1080p	4K+HDR
Watch on your TV, computer, mobile phone and tablet	✓	✓	✓

HD (720p), Full HD (1080p), Ultra HD (4K) and HDR availability subject to your internet service and device capabilities. Not all content is available in all resolutions. See our [Terms of Use](#) for more details.

Only people who live with you may use your account. Watch on 4 different devices at the same time with Premium, 2 with Standard and 1 with Basic.

Next



RED CARPET

# 'The Watcher' Premiere: All Eyes on the Stars of the New Mystery Thriller

READ NOW

By Lawrence Yee • 9:15 am



## TRENDING Spotlight



WHO'S WHO

### Raise Your Gold Goblet to the 'Love Is Blind' Season



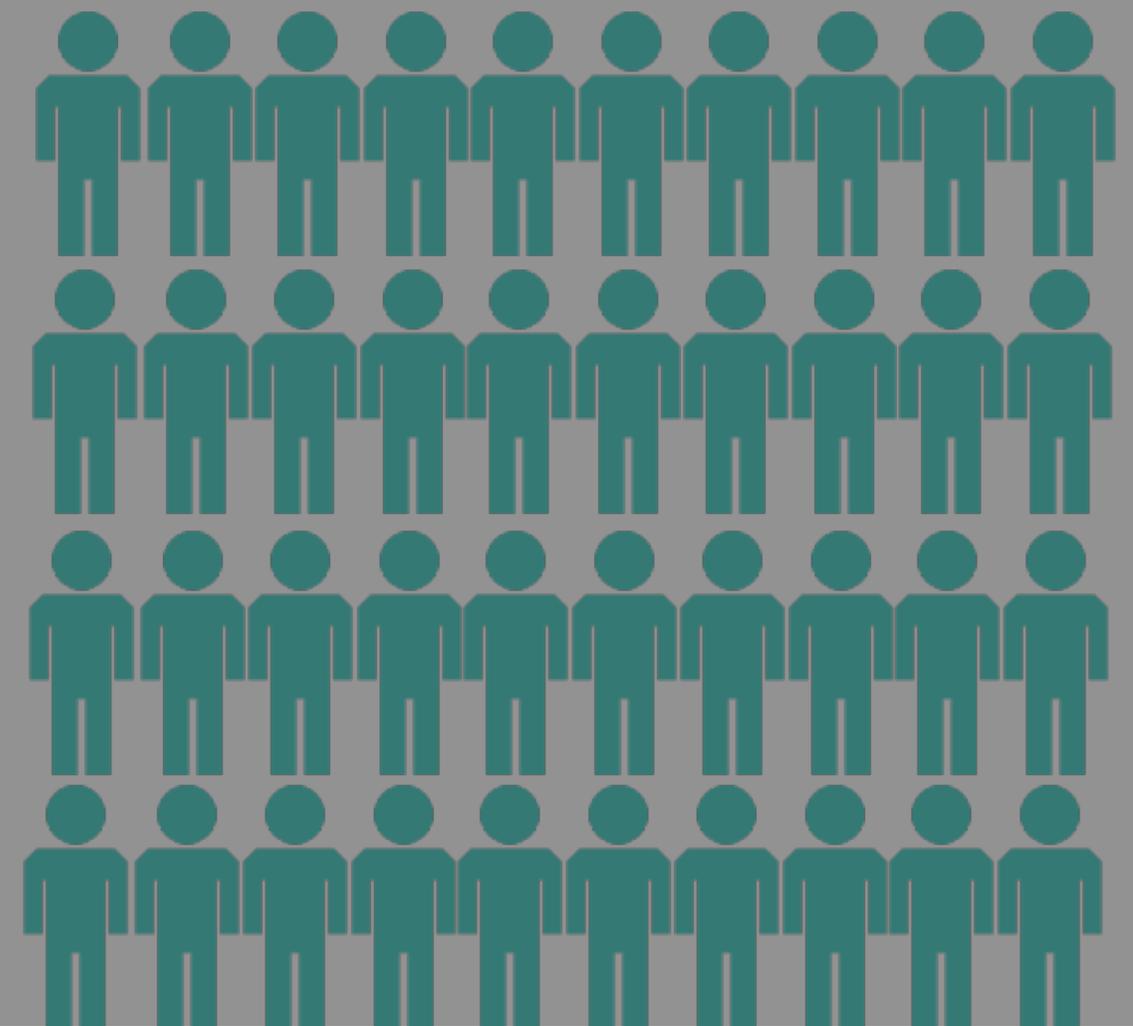
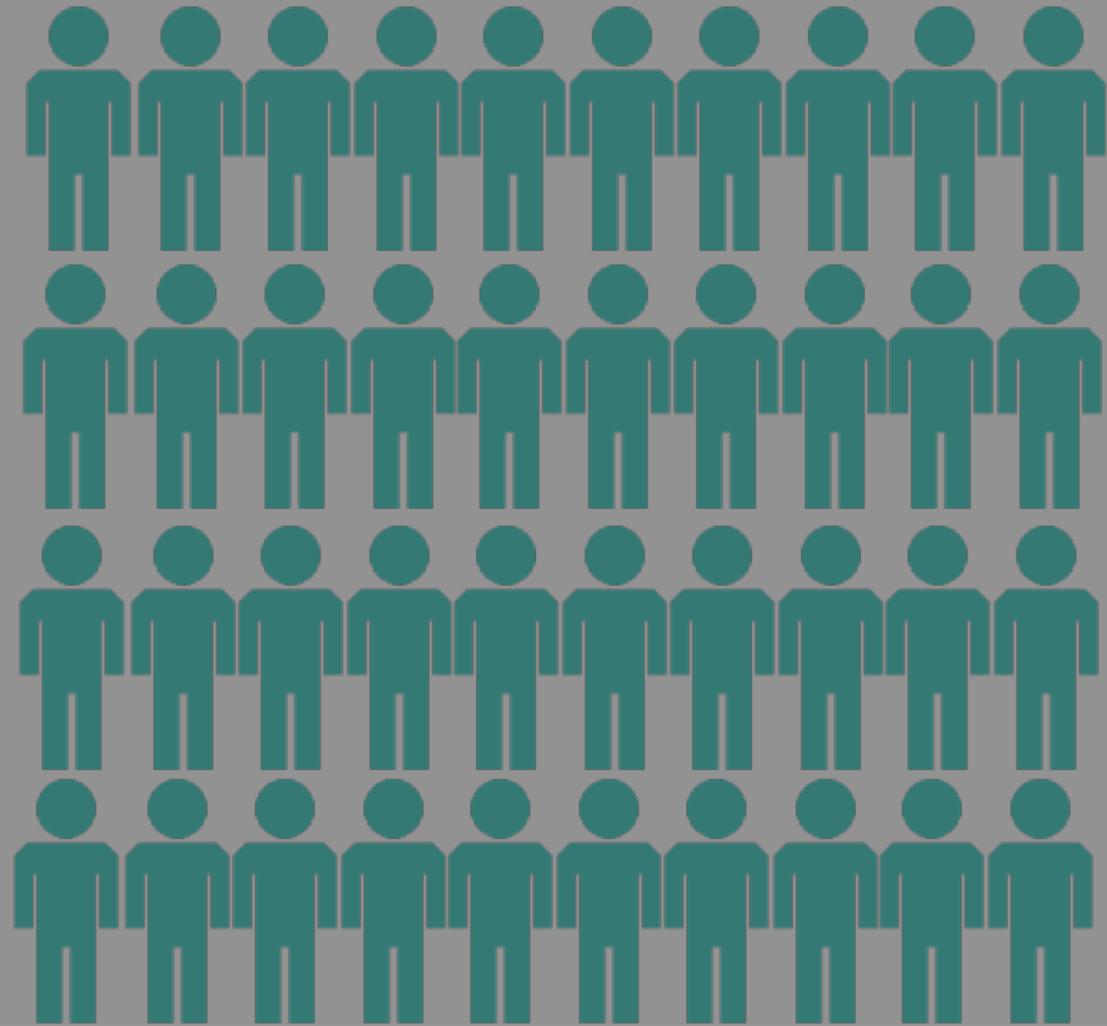
UP CLOSE

### How 'Entergalactic' Became a Celebration of



BEHIND THE SCENES

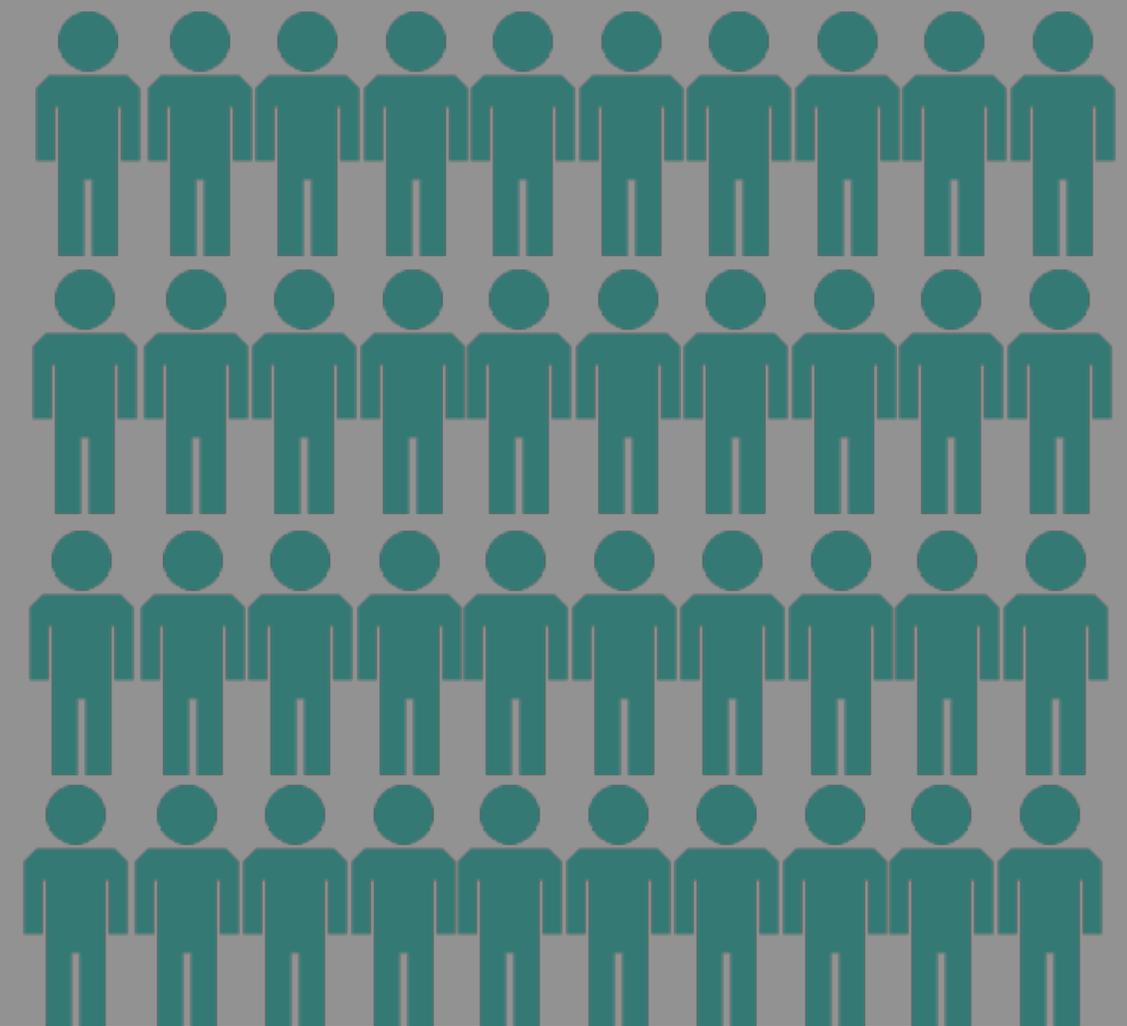
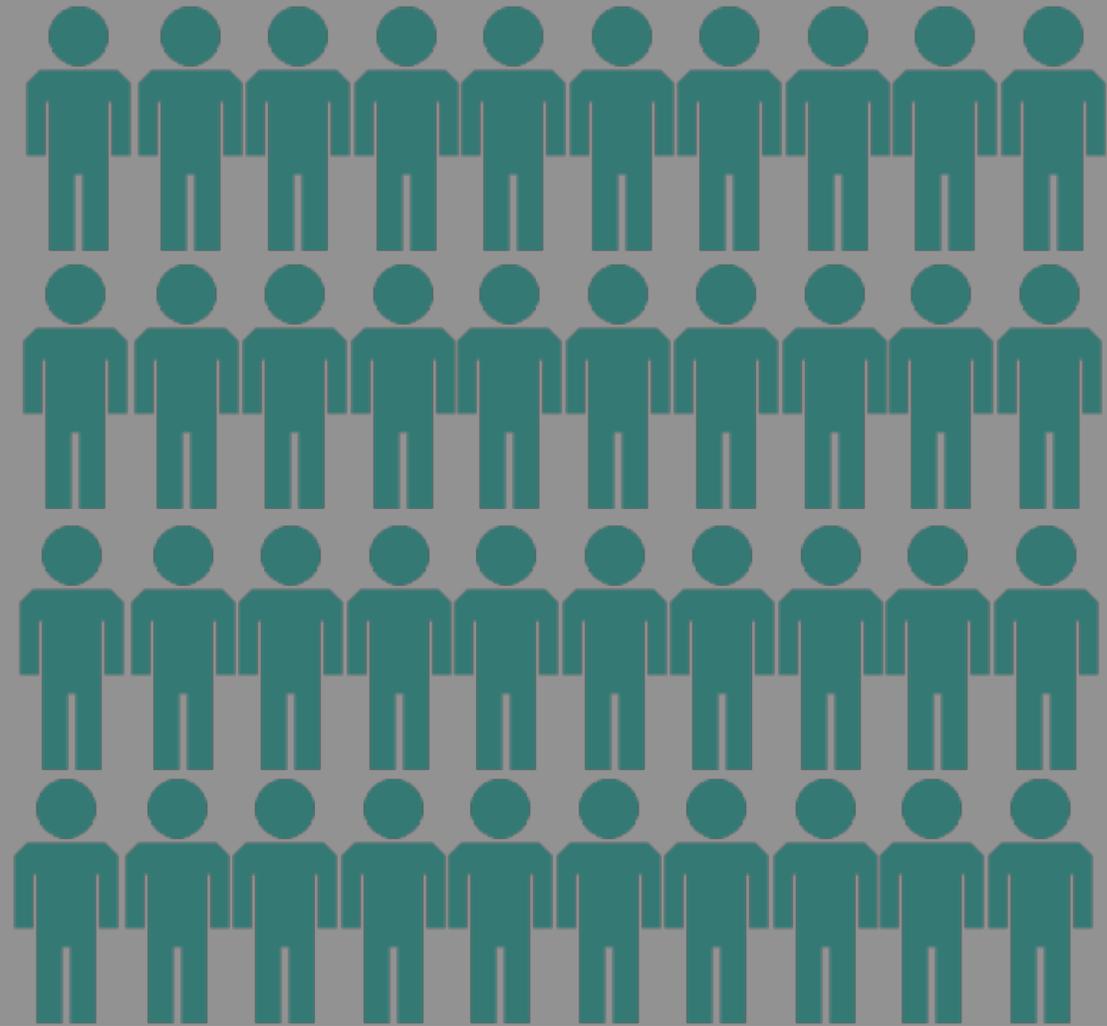
### Swoon Over Lana Condor and Noah Centineo's



**Web Foundation**



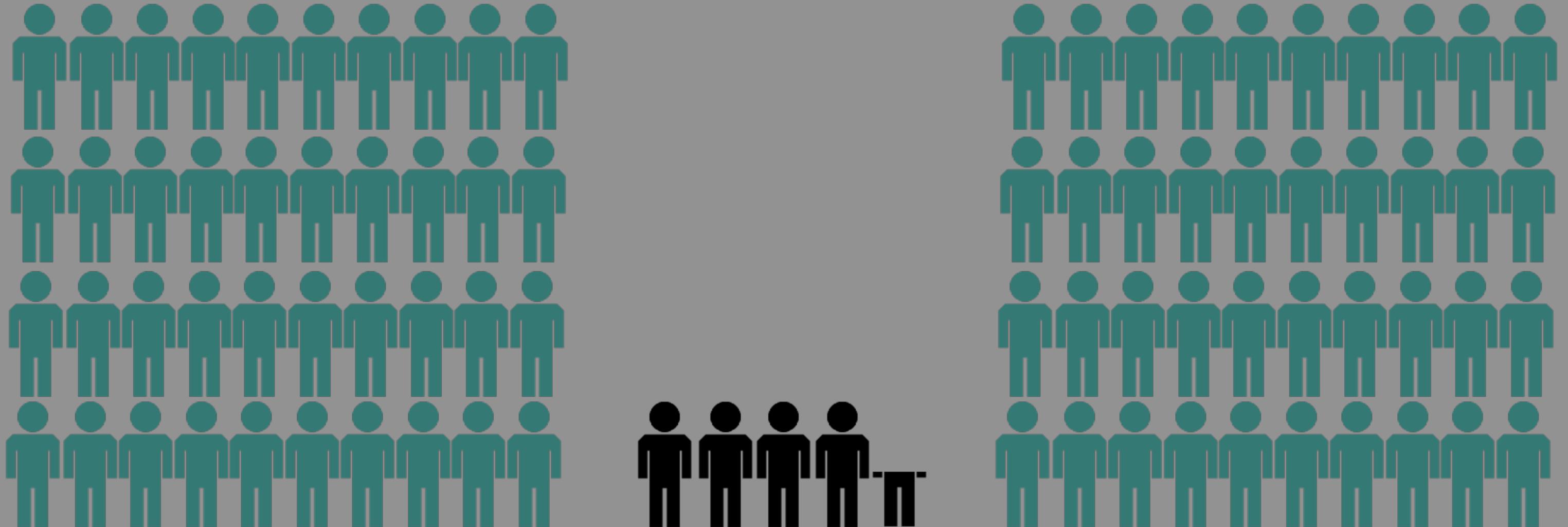
# Netflix.com



**Web Foundation**



# Netflix.com



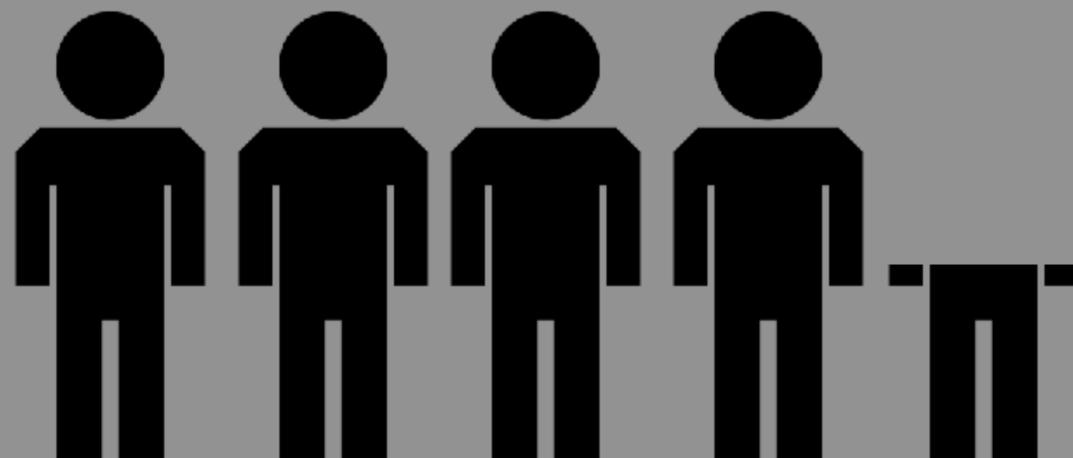
**Web Foundation**



Signup

Streaming

Tudum



**Web Foundation**



- ♣ What a platform is
- ♣ What a platform does
- ♣ How a platform is made
- ♣ Lessons learned

TypeScript

React

Emotion / Less

Falcor / GraphQL

Webpack

NPM

**Netflix.com**



**Web Foundation**





# **Web Foundation**



**Nodequark**

**Android**

**IOS**

**Studio UI**

**Web**

**TV**

**Nodequark**

Android	IOS	Studio UI
Web	TV	

Nodequark

Titus

Android	IOS	Studio UI
Web	TV	

Nodequark

Titus

Amazon AWS

What is a  
platform?

*A system or set of tools on  
which applications and  
services are developed*

**Signup**

**Streaming**

**Tudum**

**web  
platform**

# platform

deployment

libraries

best  
practices

git workflows

support

dependencies

common  
utilities

Build tools

debugging



**platform**



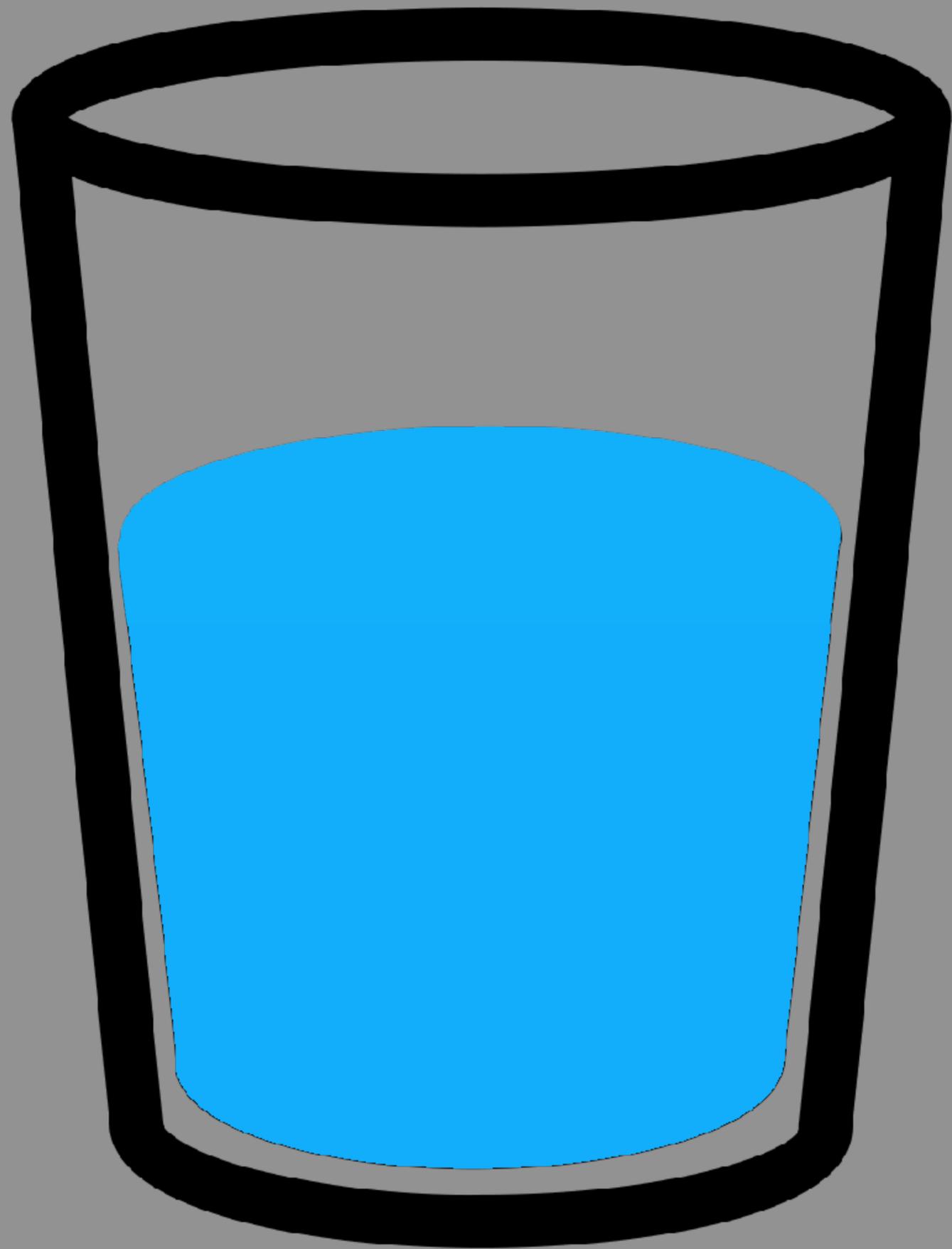
# How platforms are made



Engineer



product / service



# Platform lifecycle

technology

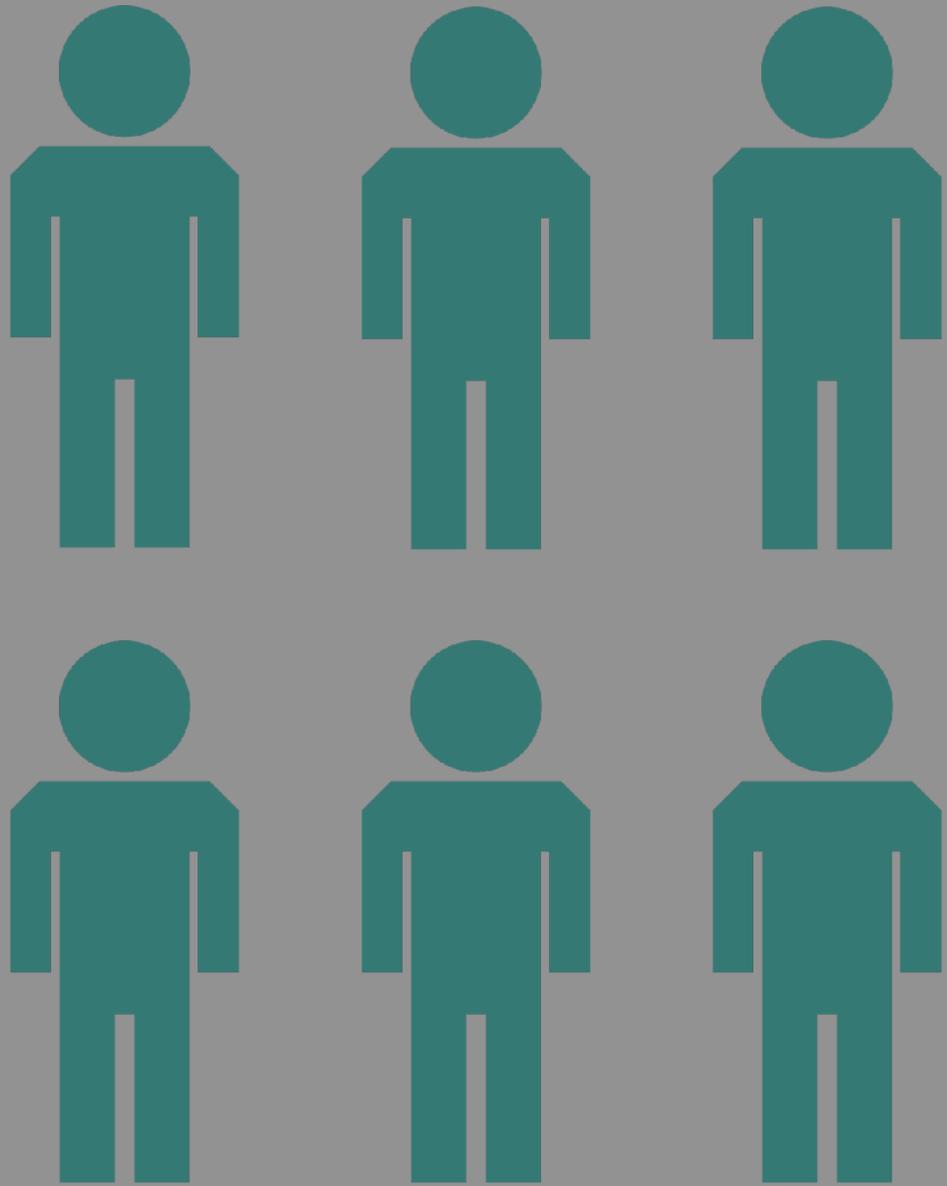
dependency  
management

deployment  
workflow

unit testing



# Platform lifecycle



# Platform lifecycle

API integrations

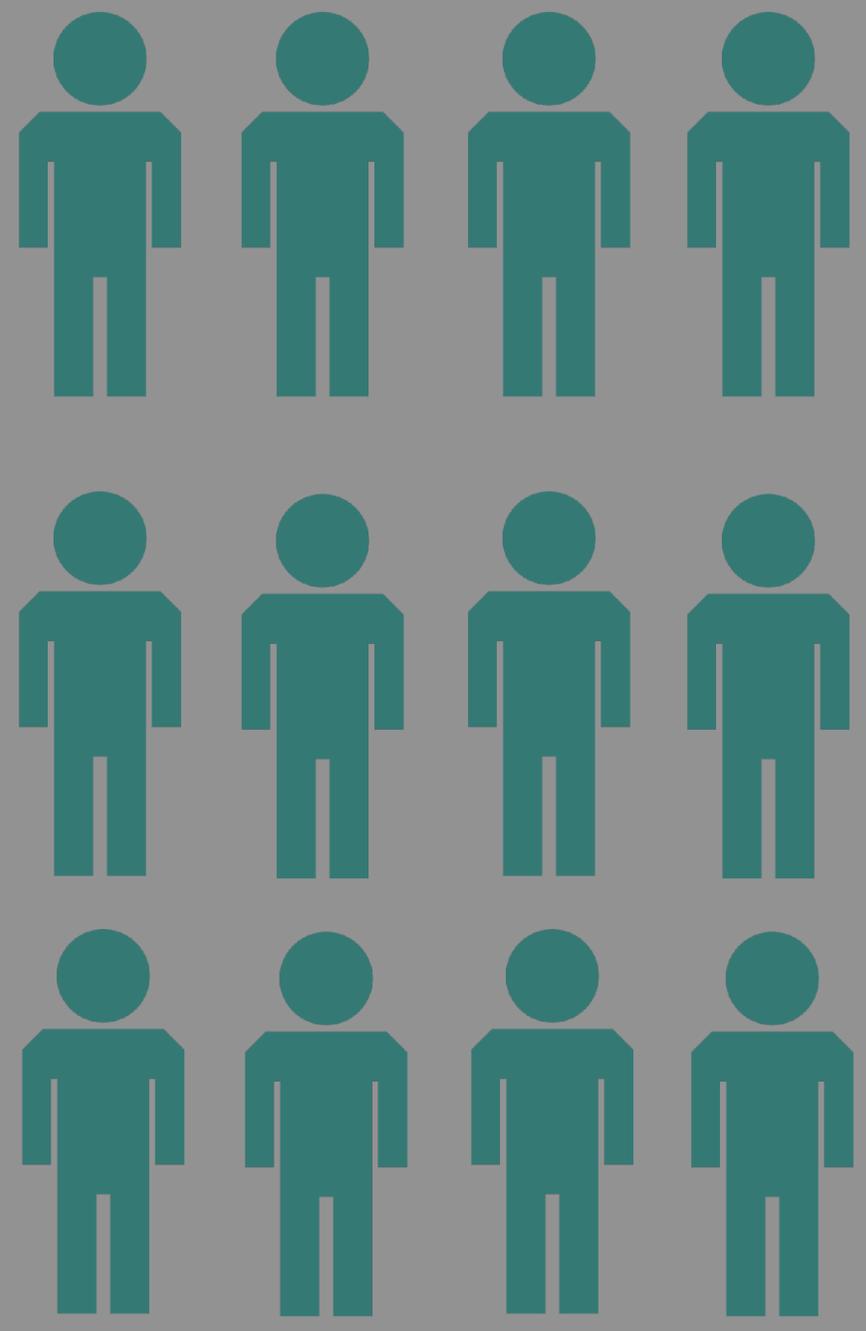
code quality

logging

metrics and alerting

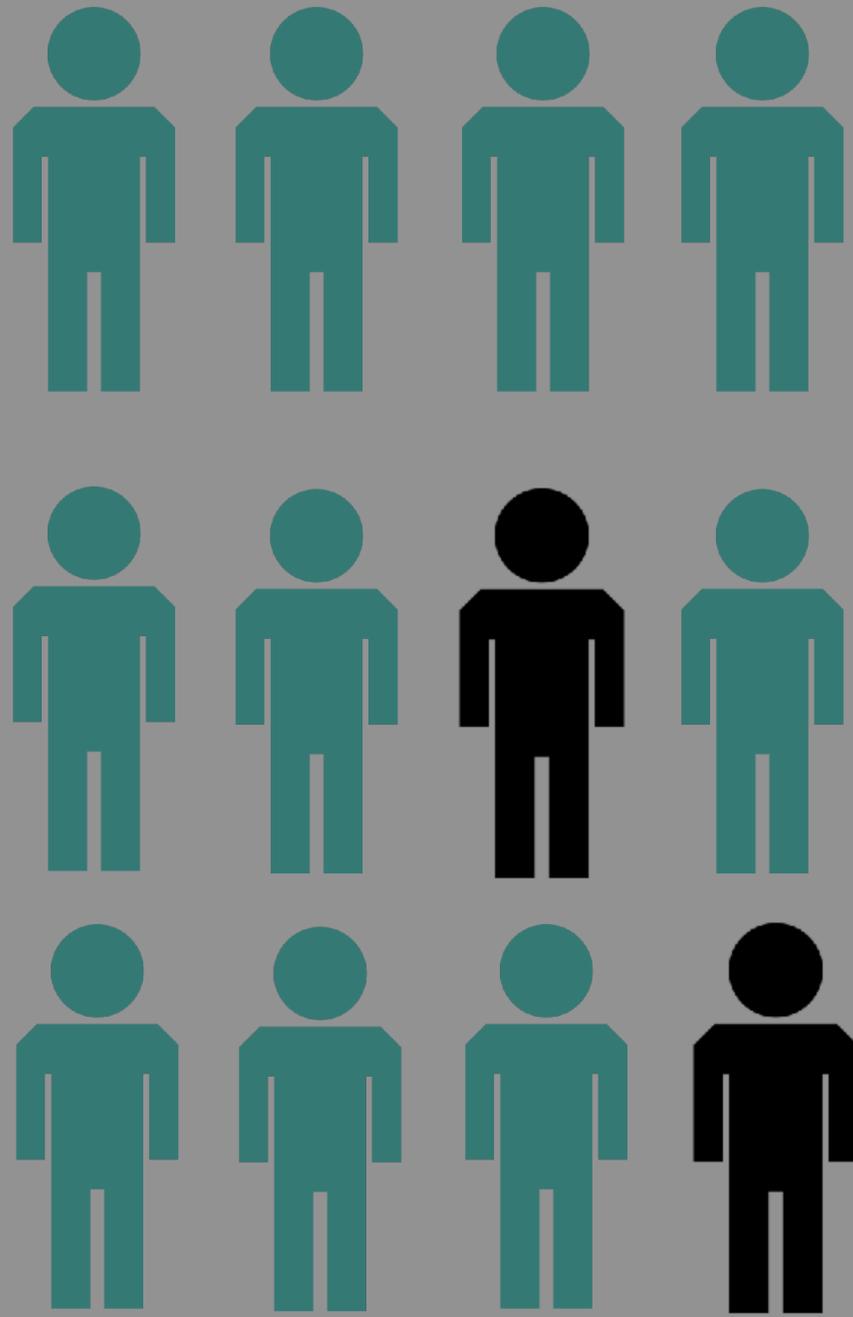


# Platform lifecycle



technical debt

# Platform lifecycle



A platform is like culture. It will exist whether you want it to or not.



# Platform lifecycle



platform

A dark blue rectangular area containing two browser window icons with globe symbols. The left icon has a blue border and the right icon has an orange border. The word "platform" is written in white text between the two icons.

What does  
a platform  
do?

*standardization at scale*

# 2002

HTML  
CSS  
JavaScript

**NETFLIX** Buy / Redeem Gift Member Sign In

Start Your Free Trial How It Works Browse Selection Free Trial Info

## Unlimited Movie Rentals

As an added benefit.. It's easier than you think!

**PLUS!**

### Unlimited DVDs: Fast

As many exchanges as you want  
No monthly limit

Over 100,000 titles  
New releases  
Classics & TV episodes

Fast, free shipping  
About 1 business day

No late fees - ever!

Pre-paid return envelopes  
Return a DVD in its pre-paid envelope and get another from your list

[Mouse over to learn more](#)

### Unlimited Streaming: Instantly

As often as you want  
Won't impact the number of DVDs you receive

Some classic movies & TV episodes  
Very few new releases  
Separate, smaller library

Anytime you want  
Movies start in as a little as 30 seconds

Where you want  
Instantly streaming over the internet to your TV via Netflix partner devices like Xbox 360 (late fall 2008), LG (fall 2008) and Roku (available now).  
or  
Simply watch online on your PC.

No additional fees - really!

[Mouse over to learn more](#)

## FREE TRIAL

Start Your Free Trial

Email

Password  4-10 characters

Re-type Password

Secure Server

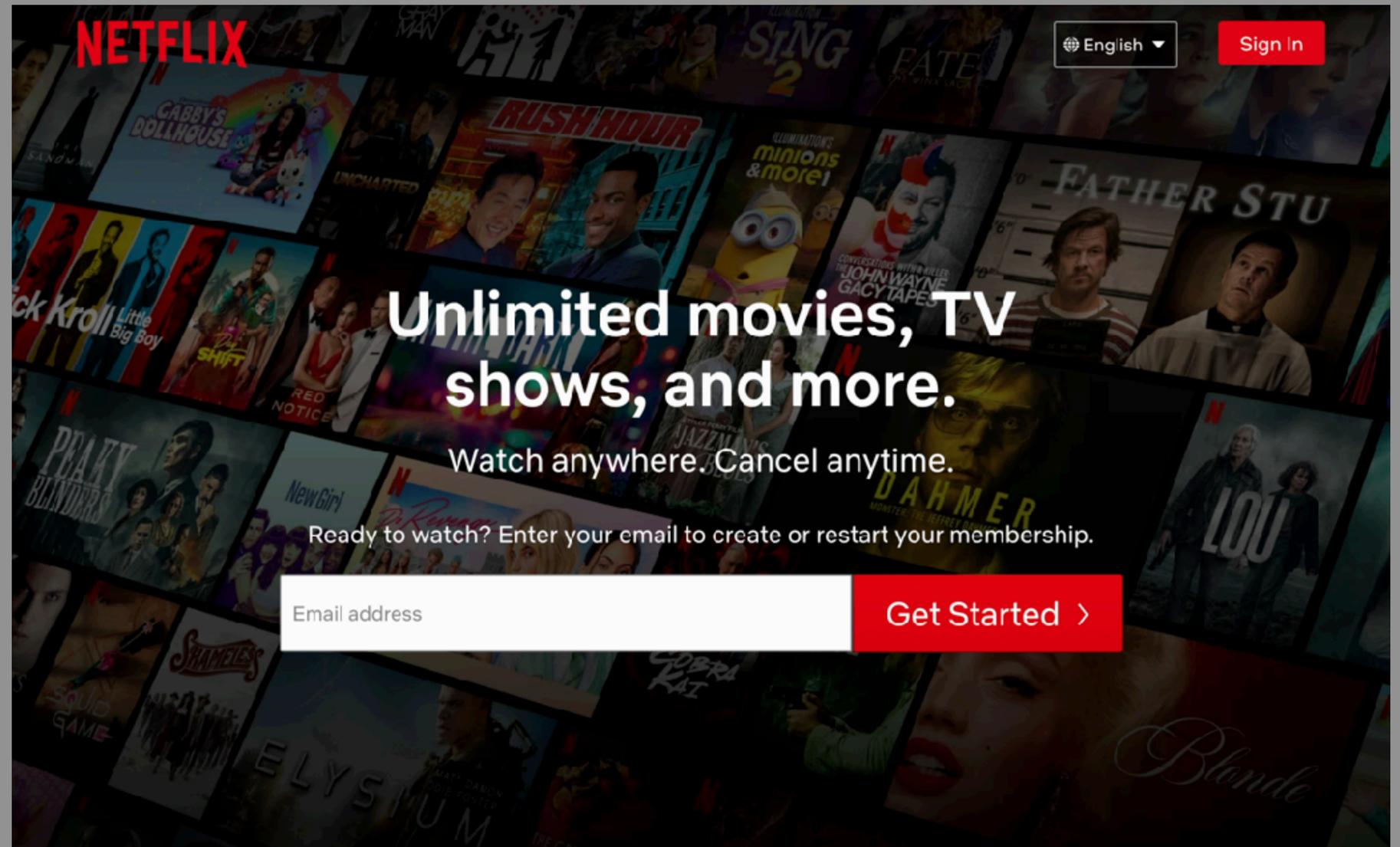
We value your privacy. Netflix will not sell or rent your email address to third parties.

[FREE Trial offer details](#)

Cancel Anytime  
Questions?  
1-866-519-1184  
24/7 live support

# 2022

HTML  
CSS  
JavaScript



## Enjoy on your TV.

Watch on Smart TVs, Playstation, Xbox, Chromecast, Apple TV, Blu-ray players, and more.



```
export default function LeadDiv() {  
  return (  
    <div></div>  
  );  
}
```

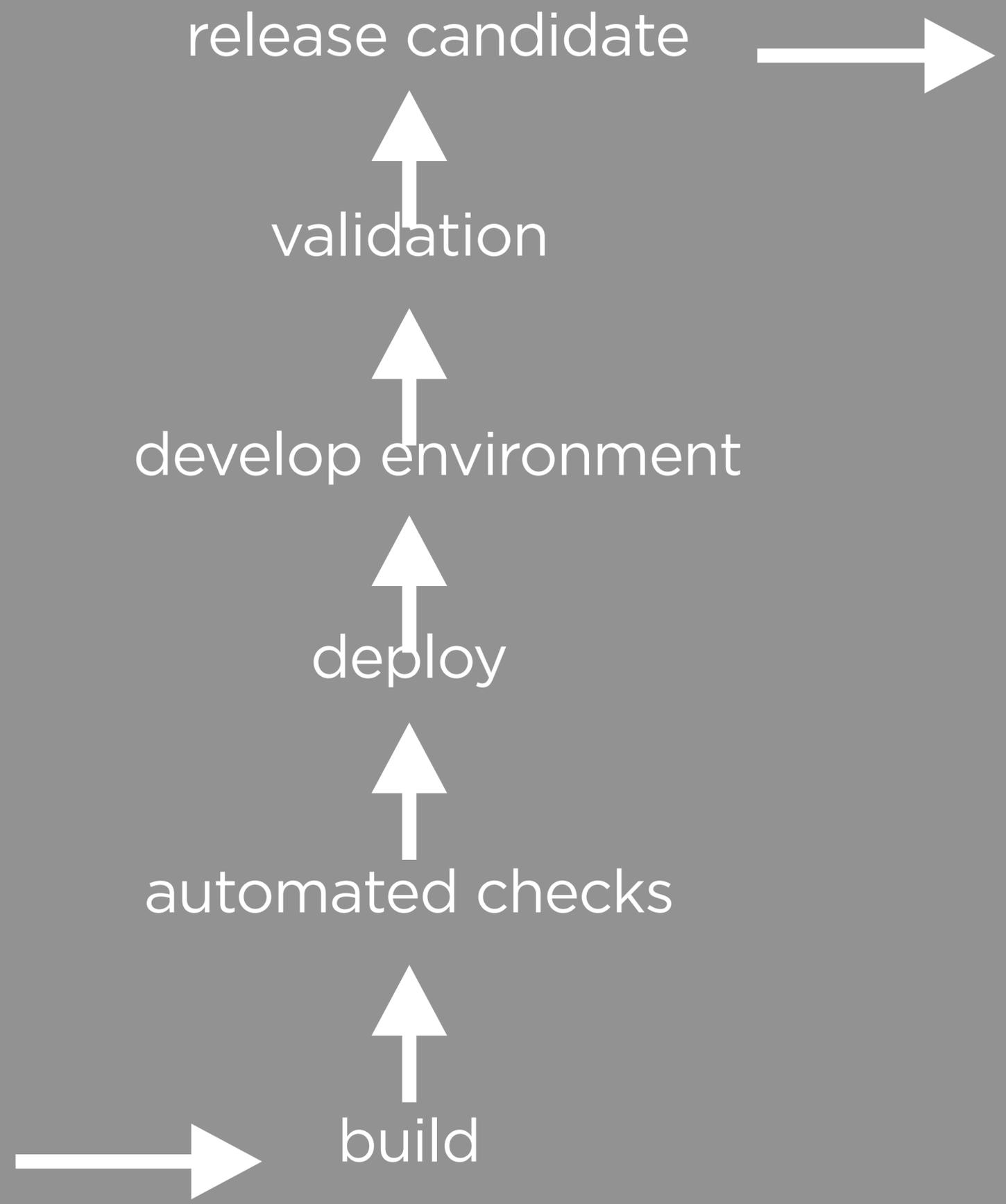
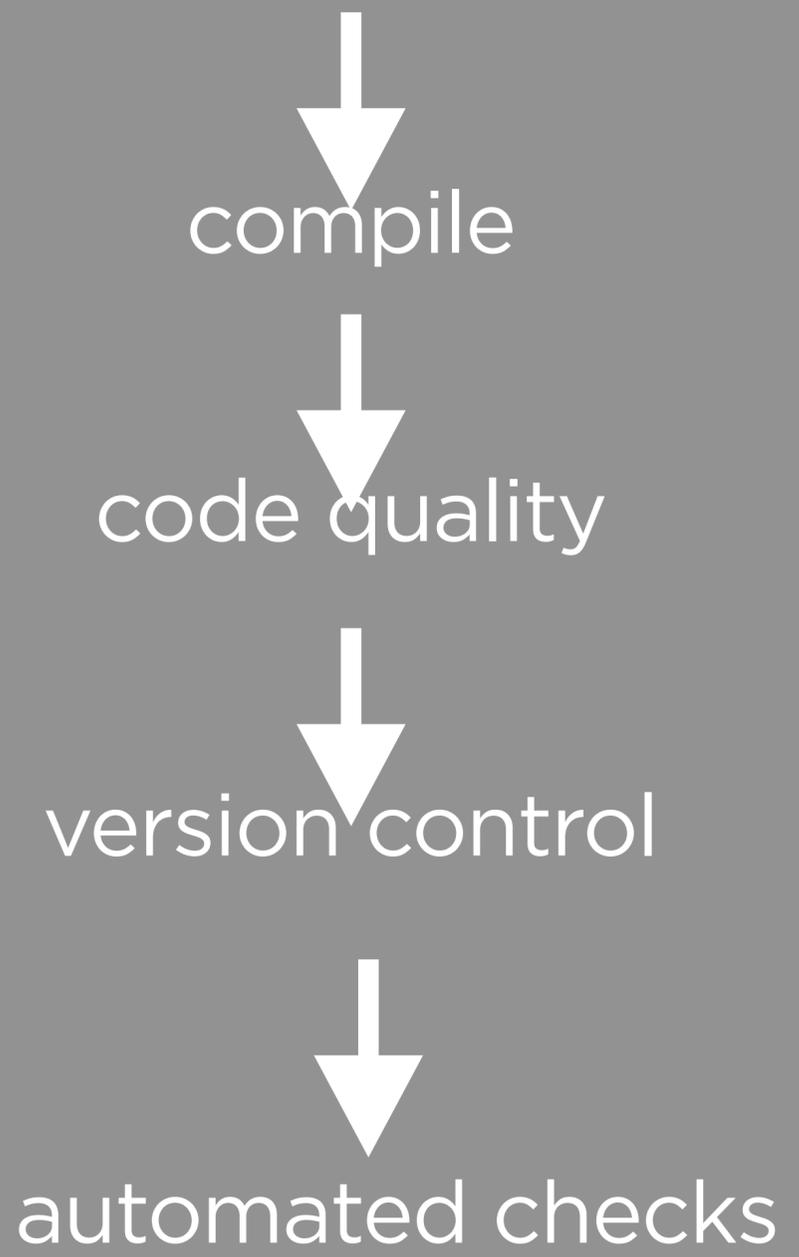


# Production



```
export default function LeadDiv() {  
  return (  
    <div></div>  
  );  
}
```

# Production



workflow optimization

network transport protocols

web assembly  
service workers UI frameworks

browser developer tools  
HTML git

status codes  
CSS

NodeJS local storage  
JavaScript

web workers npm  
async programming

accessibility XSS cookies  
IndexedDB UX design

network transport protocols

web assembly  
service workers UI frameworks

**HTML** browser developer tools

**CSS** status codes git

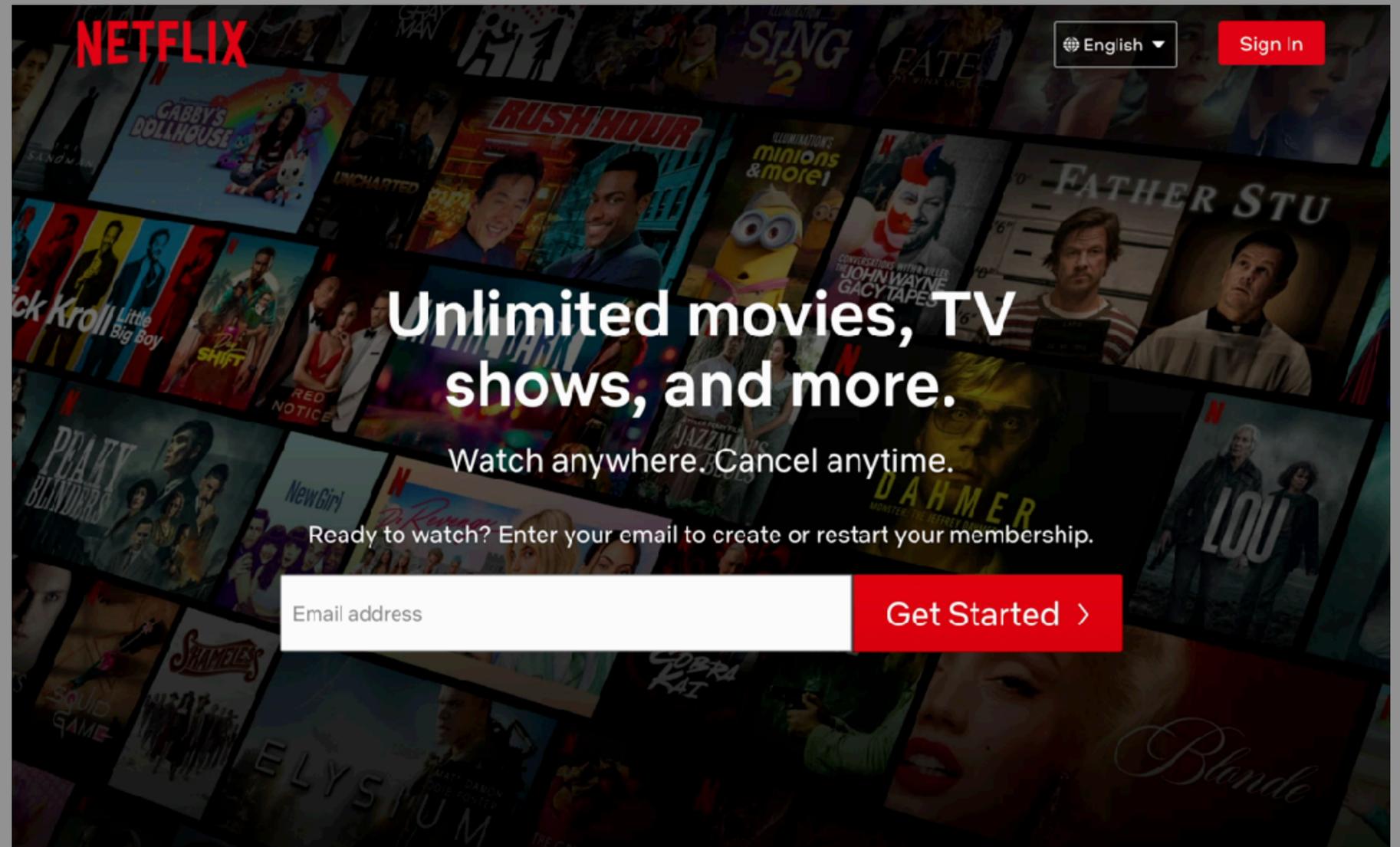
**JavaScript** NodeJS local storage

web workers npm  
async programming

accessibility XSS cookies  
IndexedDB UX design

# 2022

HTML  
CSS  
JavaScript



## Enjoy on your TV.

Watch on Smart TVs, Playstation, Xbox, Chromecast, Apple TV, Blu-ray players, and more.



~~TypeScript~~

~~React~~

~~Emotion / Less~~

~~Falcor / GraphQL~~

~~Webpack~~

~~NPM~~

Flow

Vue

Tailwind

REST

Parcel

Yarn

**Netflix.com**

technology curation

technology curation  
workflow optimization



paved road



A platform is a  
product

A platform team is an  
internal product team

**product**

**product**

**product**



**platform**

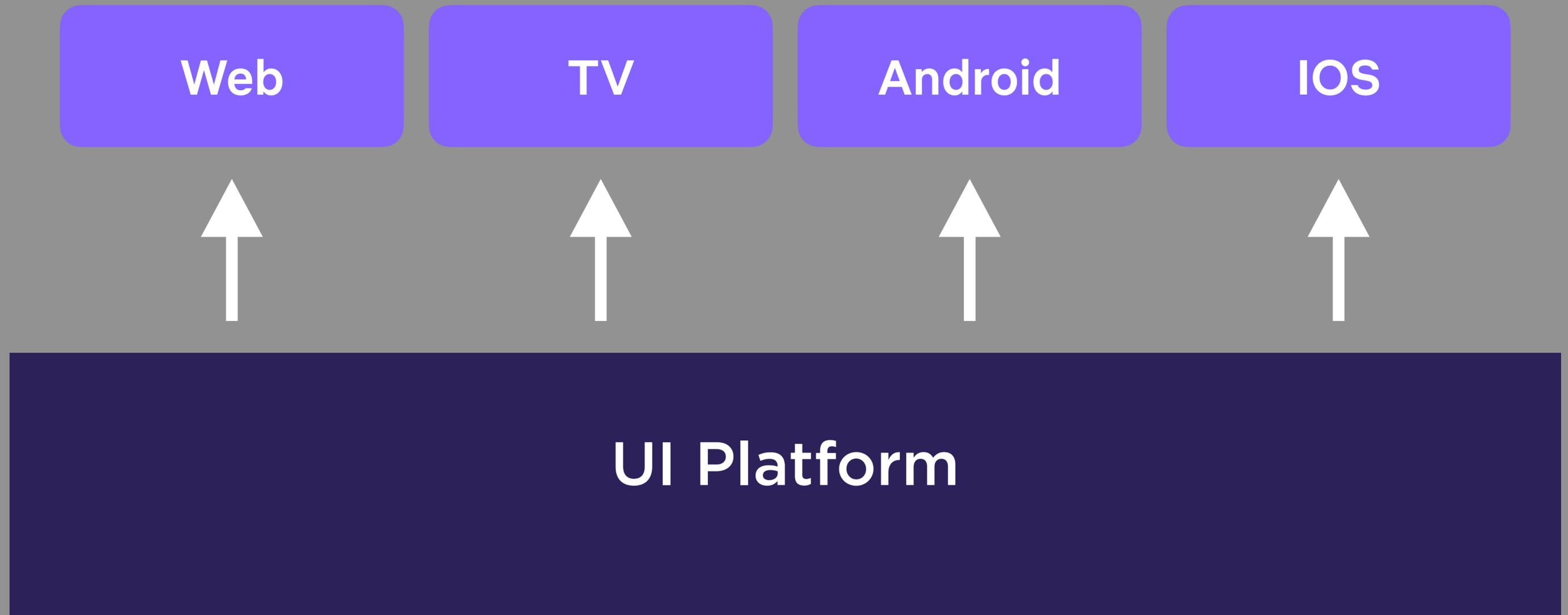


Lessons learned

Understand the  
product



# Netflix 2017



# Netflix 2022

Web

web  
platform

TV

tv  
platform

Android

android  
platform

IOS

IOS  
platform

A platform team must  
be well scoped

**application**

**application**

**application**

**application**

**application**

**application**

**web platform**

**application**

**application**

**application**

**application**

**application**

**application**

**signup platform**

**streaming platform**

**web platform**

Always account for  
support and  
maintenance







*“Give me a lever long  
enough and a fulcrum on  
which to place it and  
I shall move the world.”*

*”*

Archimedes

- ♣ What a platform is
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- ♣ How a platform is made
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# Platform Engineering



# Rise of the

[@jemyoung](#)

Platform  
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